

GRAIN
JANUARY
'44



... the "Seventh Son of a Seventh Son" who attempted to predict when and where a Dust Explosion would strike

and
**WAS HIS FACE
RED!**

Dust Explosions are absolutely *unpredictable*. But, they are not *unpreventable!* And in prevention there lies *safety*.

Robertson Safety Ventilators provide a preventive measure, because, mounted on your elevator legs, they continually vent fine dust through gravity action . . . thus eliminating the risk of primary explosions.

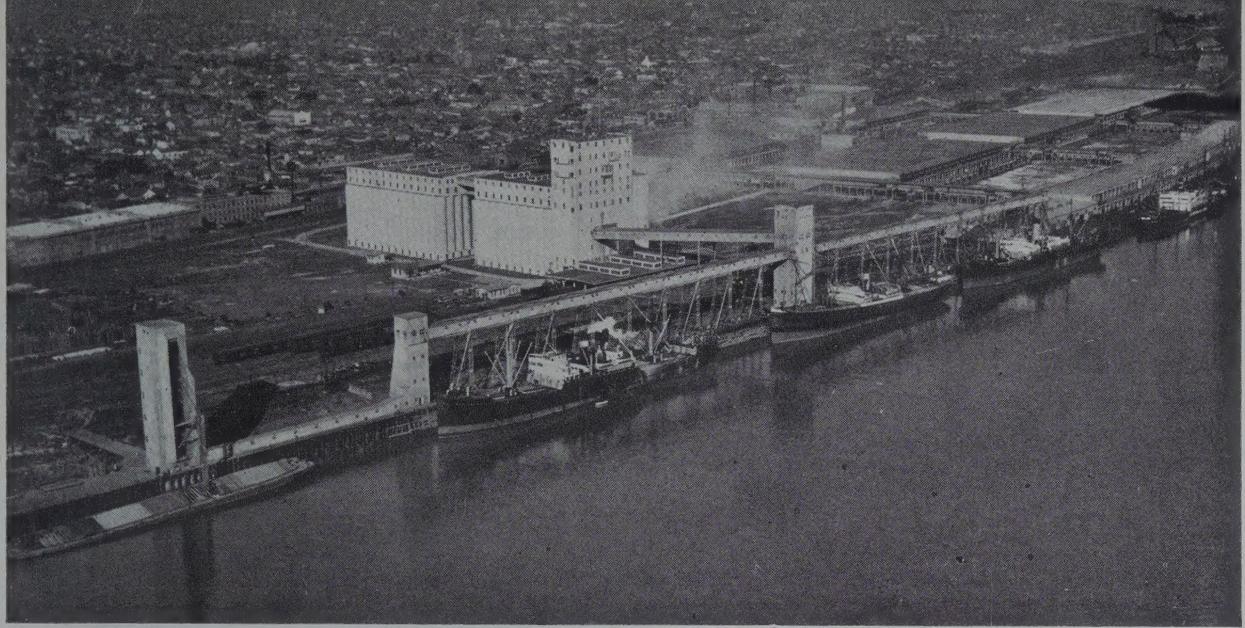
As a *final* safeguard . . . Robertson Safety Ventilators establish an "exit" through which a Dust Explosion is ushered *outside* . . . and through this release of pressure there is protection against the destructive *e-x-p-a-n-s-i-o-n* of secondary explosions.

Play safe with Robertson Safety Ventilators. Complete descriptive literature upon request.

H. H. ROBERTSON co.

Farmers Bank Bldg.

Pittsburgh, Pa.



Grain Handling Problems

and Solutions in the Gulf Area

By Charles J. Winters

Superintendent, Public Grain Elevator, New Orleans
Before Society of Grain Elevator Superintendents

OUR FRONT cover this month pictures Super Winters on the dock near the \$300,000, 18,000 bu an hour marine leg mentioned in his remarks, showing a section of the shipping gallery in the background. With a capacity of twenty cars ahead of each of the four unloading tracks and an 800 car yard, the eight interlocking receiving pits of 2,000 bu each take in better than 200,000 bu from 160 to 180 cars in a 10 hour day, exclusive of the unloading capacity of the marine leg. One of the most completely equipped elevators, the "Public" enjoys an enviable reputation for safety, efficiency, cleanliness and exceptional flexibility of operation.

Two receiving legs each handle 25,000 bu an hour to the 426 tanks and bins totaling 2,622,000 bu capacity. Four shipping legs fed by eight basement conveyor belts load out 100,000 bu an hour.

Probably no other export elevator has so large a dock frontage devoted exclusively to grain handling purposes, Mr. Winters says of this 2,090 ft. expanse. One berth of the five can be utilized for discharging barges or ocean-going steamers, one for loading sacked grain from the warehouse platform and three for loading bulk grain from the shipping gallery.

At the Sacking Wharf the grain is hauled direct to elevated hoppers located in the Wharf Shed. Under the hoppers are four high-speed Richardson Automatic scales with over 1,000 bu per hour capacity each. Bags are machine-sewed as they leave the scales and it is possible to deliver direct from machines to ship without delay.

Carter-Disc Separators augment other facilities for cleaning and reconditioning mixtures, along with two 4,000 bu driers. All mechanism is electrically actuated and controlled.

Super Winters has been associated with the Board of Commissioners for nearly twenty years. Until recently Superintendent of the Public Cotton Warehouses he was placed in charge of both facilities over two years ago with the approval and commendation of the local grain trade.

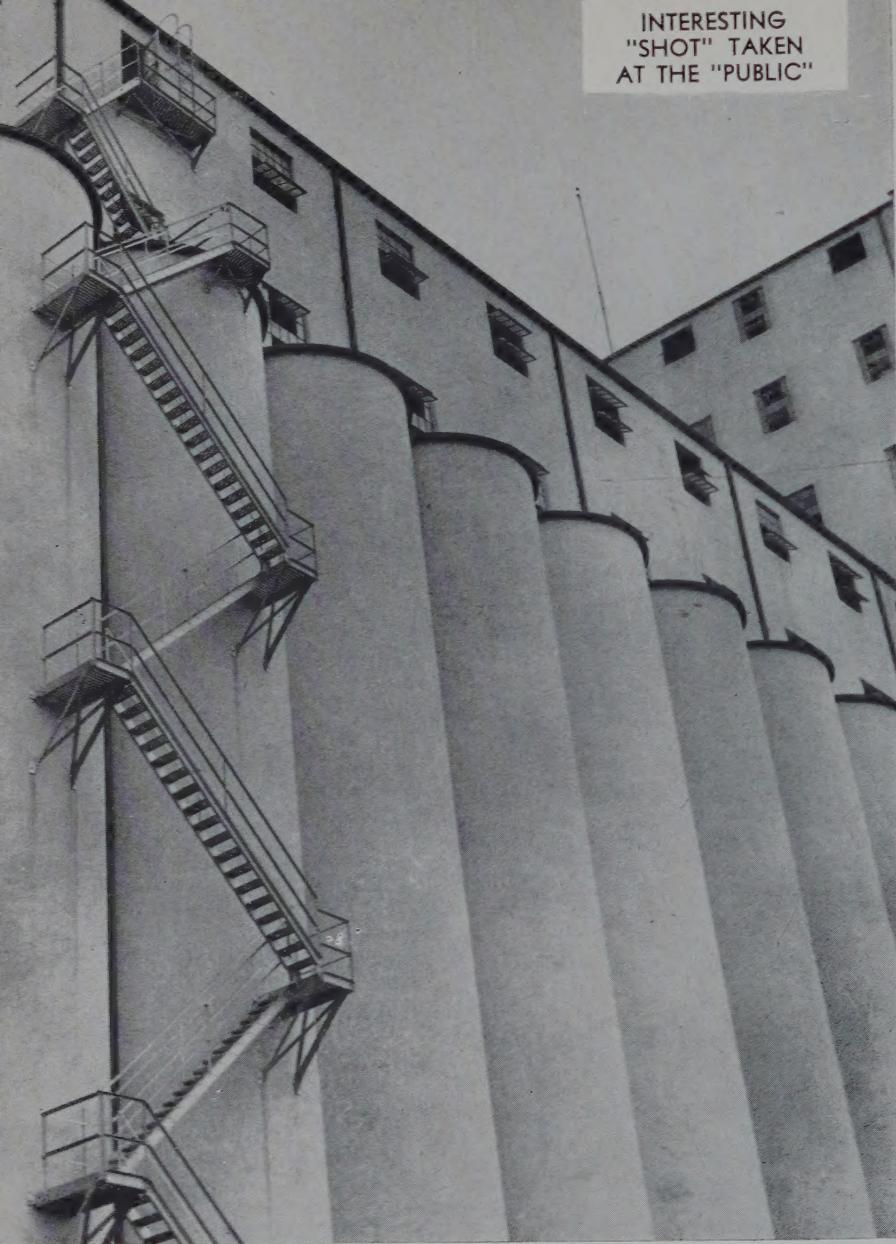


RAIN is physically handled in the Gulf area in a manner quite similar to that of terminal elevators elsewhere in this country, except for one important factor—climate. The oldest inhabitants of New Orleans have never seen snow blanketing the ground. The temperature only rarely drops as low as 32 degrees. When it does it is usually an overnight affair, a matter of not more than a few hours. Consequently, we are waging a never-ending war against weevil and similar insects.

Some of my Northern colleagues would indeed be amused at our painstaking care in seeing that every ventilator, window and door of our elevator is thrown open to receive the august person of Jack Frost every time he condescends to pay us one of his infrequent visits.

During February of last year I chanced to be in Minneapolis when the mercury stood at 32 below. The experience nearly killed me. I had never dreamed I could be so cold and live to tell about it afterwards. It took three weeks after I got back to the deep South for my teeth to stop chattering. Yet how I did wish that I could have transplanted our elevator

INTERESTING
"SHOT" TAKEN
AT THE "PUBLIC"



up there just long enough to turn over the two million bushels of hard wheat we have had in storage for the past two years.

However, with the splendid co-operation of the insecticide manufacturers who recognized our problem and produced for our use a fumigant, which in addition to exterminating weevil tends to lower temperatures, we have found the means of confounding the insect world as well as Mother Nature.

Zelenys, Mechanical Drier Cooler, Help

AS a further precaution against the vagaries of climate we have installed the Zeleny System in all of our storage tanks. We have also attached a mechanical cooler to each of our 1,200 bushel capacity per hour driers. Each day readings are made at ten foot levels within each tank and all grains showing temperatures not consistent with what we consider

safe storage are removed, aerated and cooled before being returned to storage.

Probably I should not be making statements about insects and the vagaries of climate at New Orleans. If this ever gets to the ears of the Association of Commerce I am liable to find that they have taken up my membership card and exiled me to live in Minneapolis.

Getting back to the problems. When the marine legs for unloading bulk grain from barges and ships were installed at our elevators, Ole Man River, because of his tendency to rise and fall as much as 22 feet within a matter of days, presented us with a real tough one. The enigma was complicated by reason of the necessity for each leg to be able to accommodate the smallest river craft or the largest type of ocean going steamer. Our capable engineers succeeded in overcoming this obstacle too, and today

our marine legs can handle any conceivable type of vessel regardless of the stage of the river.

Receipts All "On the Line"

ONE of the most perplexing problems with which we have had to deal lies in the fact that grain comes to us after having passed through at least two prior elevator operations. Practically all of our receipts are "on the line." Consequently, we have had to develop the art of grain mixing into an exact science—the principles of which we are not going to divulge at this time, especially to those operators who customarily ship to us.

Unlike most of the grain elevator facilities elsewhere which are owned and controlled either by private capital or railroads, the facilities at New Orleans are publicly owned and are open to all shippers on the basis of equal rates.

Fifteen years ago the Port of New Orleans, in volume of grain exports, ranked first among the ports of the nation. I am sorry to say that she does not enjoy that position today. Why? I wish I knew, because if I did I would have the solution to an enigma which in any discussion of problems and solutions necessarily becomes the number one problem that, over and above all other problems, must be solved before New Orleans can regain her place in the sun as the grain export center of North America.

We all know that the war has closed off most of the export markets of the world. But even before the war the grain movement through New Orleans showed a considerable decline. Some of our local experts said that this decline was natural; that grain from that time forward would naturally move through points which would ultimately eliminate New Orleans from the grain exporting business. Others attributed the decline to certain governmental regulations. Still others laid it to detrimental freight rates, while some went so far as to say that unfair practices were being resorted to at certain terminals to keep grain away from the public facilities at New Orleans.

Rates Unfavorable

WE KNOW that the grain dealers of New Orleans have been made the victims of discriminatory freight rates. Freight rates have been fixed, for instance, from points in Kansas to points in Southeast Louisiana at 5¢ per hundred under the New Orleans rate from the same origin territory. This has resulted in completely closing off domestic markets to our dealers while every other so-called gateway or transit point located on circuitous routes are accorded transit privileges of as much as 50% of circuitous routing based, of course, on the length of the short haul.

This address started out to be a discussion of grain handling problems and solutions in the Gulf area and

wound up, as should have been expected from a native son, as a dissertation of the Port of New Orleans. It is probably better that way. I am quite sure that our competitive brothers in the Gulf area would not relish the idea of my being up here talking in their behalf anyhow.

But, seriously, I have tried hard to leave you with a picture of what we grain people have and what we hope for at New Orleans. Maybe the day is not far distant when the horrors of war will be behind us and New Orleans will have found the solution to all of the problems with which she is beset today. When that happy era arrives nothing will make me prouder than to address another convention of this great Superintendents Society as the representative, in volume of its exports, of the number one port of the nation.

CONSTRUCTION REQUIREMENTS EASED

Applications for construction of necessary facilities or additions to facilities already built that formerly had to be approved by WPB in Washington will be processed in a different manner from now on. WPB has authorized regional offices to approve construction applications, with certain exceptions, if the project cost is less than \$25,000. The metal situation has been somewhat eased and there has been encouraging news in regard to increased output of civilian goods.

The Army and Navy, however, discount the possibility of more steel for more civilian goods other than those specifically mentioned, stating that in view of the more abundant supply of metals, certain types of construction in both the Army and Navy would be increased, so that balance left for civilian supply will not be any greater than will be absolutely necessary. If you are anticipating the building of an annex or additional facilities in your own plant, your application for this construction can now be taken up and processed through the regional offices of WPB.

Equipment Production Eased

Washington (special). — Increased production quotas for grain milling machinery and equipment are announced by WPB and represent a 40% boost over 1943 manufacture. Quotas are based upon allowed percentages of controlled materials used in the base period—an average of the years '39, '40 and '41. While percentages vary for different types of milling machinery, the average is 105% of the base period output, which quota is set up as schedule 7 to Limitation Order L-292. These restrictions do not apply to materials obtained through Priorities Reg. 13.

More Rope Coming

You can probably count on getting increased supplies of rope, as cordage manufacturers are instructed to set aside 12% of their manila rope production, 23% of sisal rope and 60% of jute rope for non-military orders.

Priorities Changed

Parts for laboratory instruments and equipment, and closures and closing devices required for packaging products to be shipped or delivered, have been added to Priorities Reg. 3.

The man at the top has invariably been at the bottom of things.

Revise Resale Regulations

Special permission to sell idle and excess controlled materials for any permissible use under WPB orders and regulations may now be granted by your regional WPB office. The buyer need not certify that he is entitled to the material under CMP allotments nor need he deduct the amount of materials so acquired from his allotment account.

Customer: "I've brought that last pair of trousers to be reseated. You know I sit a lot."

Tailor: "Yes, and perhaps you've brought the bill to be receipted, too. You know I've stood a lot."

Today's "STAND-OUT" DUST COLLECTOR

the DAY DUAL-CLONE



for 4 Basic Reasons:-

1. LOW RESISTANCE
2. HIGH SEPARATING EFFICIENCY
3. COMPACT DESIGN
4. EASY INSTALLATION

(no need to cut through upper or lower floors)

Patented DUAL-CLONE construction utilizes to the maximum the basic principles of cyclonic separation. DUAL-CLONE is the foundation of

DAY Complete DUST CONTROL SYSTEMS

for all types and sizes of grain handling and processing plants. Each job correctly engineered, manufactured and installed. The DAY organization offers you the benefits of 62 years of progressive experience in solving dust control problems.

Dust Control Is too Important not to have the information in our booklet "DAY DUST CONTROL". Write for a copy—no obligation.

The DAY COMPANY

810 Third Avenue NE.
Minneapolis 13, Minn.

In Canada:—
The Day Company of
Canada, Ltd.



"Slim" Carlson Unfolds the Science of HUMAN ENGINEERING

SLIM TO TRAVEL

Frank E. "Slim" Carlson joined the Underwriters' Grain Ass'n, Chicago, on Jan. 10, for which affiliation he is well qualified. With his former elevator admirably established on an advanced plane of mechanical and maintenance control and a program set up for ten years hence, he will now call on the many elevators insured by this group of 171 fire insurance companies making up the U.G.A. in Kansas City, St. Louis, Chicago, Milwaukee, Minneapolis, Duluth, Omaha and intervening cities. Being as widely known as he is, "Slim" knows "the boys" are going to give him every co-operation possible, and he in turn is going to lend a hand wherever he can, too. "Something new has been added."



Give the new employee the proper start through education or training and he will become a most valuable and safe worker.

The new employee goes through three stages before he becomes very useful to the employer.

1. *The adjustment stage.*
2. *The appreciation stage.*
3. *The application stage.*

When he is in the first, or adjustment stage, he is mentally adjusting himself to his new surroundings—in fact everything is new to him. He wonders what kind of a guy his boss is, what kind of a fellow the guy working next to him is. He knows he is lacking in skill and he wonders if he will ever be able to do it as well as sees others doing it. He wants to learn, he wonders if they will put up with him long enough for him to learn, or in other words if he will be able to keep his job.

A strange noise here and there draws his attention. He wonders now if it's safe to work where he is working. A belt slips off and lands close to him on the floor. He shys and wonders if he should even try to stick it out. In fact, by this time, he has worked up quite a sweat without having done a tap of work. This, I hope, will give you some kind of an idea of how necessary it is that the new employee be constantly in charge of

some supervisor who not only understands his business, but also understands human beings.

Next we enter the appreciation stage. By now he is quite familiar with his surroundings, the various noises, etc. He has also found out that his boss isn't such a bad fellow after all—he only looks that way. And the guy next to him is a good egg, and willing to help him if he needs help. He feels pretty good now. He really thinks he is going to like his job now.

Here Lies T-H-E Opportunity

FOLLOWING this he enters the application stage. He is really getting down to business, and if he has been properly handled in the first two stages, he will be a most valuable employee and a safe worker. Through the first two stages he has been costing the company money, but at this time he is the most impressionable, his mind is more plastic and capable of being molded, and industry is certainly missing something if they do not see to it that he receives the proper training at that stage.

We can teach our men the ideas or principles, but the skill he must learn or develop for himself just as much as in golf.

It seems to me that the majority of people that read of a bad automobile smash-up, or a bad explosion—let's say in some processing plant or elevator—seem to get the impression that things like that only happen in

far away places, in some other plant or some other town perhaps, or at any rate "it can't happen here". The sooner people get over that idea and start analyzing their own problems, and by that I mean trying to visualize the hazards that exist in their various plants—and then do something about them, the better it will be for all concerned.

The Purchasing Department can perhaps play a larger role in the Safety Program than they have heretofore, especially now when there is a shortage of materials for in many cases the old stand-by, which they had been purchasing for years can no longer be had due to certain material shortages. Now in order to carry on we must take a substitute or another brand. The old brand, which we used for so many years, had proven itself. It did its work well and was perfectly safe to handle.

But how about the substitute, or that new brand, that new material, that new machine—are they perfectly safe? Here is where I believe the Purchasing Department can play a big part in accident prevention—by making certain standards a part of the order. If a new machine is ordered, it should be ordered guarded according to the latest safety standards at the factory. Guarding done in the field comes considerably higher than when done at the factory, and in most cases is not done nearly as well as when done while being built at the factory.

Substitute Cost Two Lives

LET me tell you about a case where the substitute of materials cost the lives of two men. To mention the name of the company would serve no purpose, but what happened to this company can happen to any. It seems that a certain boiler compound, which had been used for years, was substituted. Whether it was done because they could not get the old material, or whether it was done for reasons of cost I do not know. The important part is that the Purchasing Department substituted the old compound for the men.

The substitute apparently was doing its work well. Then one day it became necessary to do some work in that boiler which involved three men. One man stayed at the man hole to relay messages or run errands for the two welders who entered the tank to repair the splash plates as some of the rivets had let go. A torch was used for heating up the rivets

ACCIDENTS HELP THE AXIS



you can protect exterior
masonry surfaces

with non-critical materials

**BRICK
CONCRETE
STUCCO**

The A. C. Horn Company announces WATERFOIL, a scientific contribution to masonry protection. Ten years of development are back of this product, including application on many structures under varying climatic conditions. WATERFOIL is now available for general use.

No priorities are needed for WATERFOIL. It is manufactured of non-critical materials . . . irreversible inorganic gels. WATERFOIL is not a paint . . . it contains no linseed oil . . . no resin emulsion . . . casein or cement. It hardens into a heavy coating of microscopic "spongelike" character. Water vapor finds exit; but actual water penetration is impeded, thus helping to prevent reinforcing bar rust and concrete spalling.

WATERFOIL becomes an integral "welded" part of the masonry surface to which it can be applied by any careful workman. No primers are used. If your masonry structures, brick, concrete or stucco, need decorative restoration and protection, get the details on WATERFOIL. Backed by a nation wide company with 47 years of experience. Write today for literature.



A. C. HORN COMPANY

Established 1897

BUILDING MATERIALS DIVISION
Long Island City (1), New York



WATERFOIL

THE UNIQUE TREATMENT FOR EXTERIOR MASONRY SURFACES

and to do some welding. The men finished the job in a short time, filled out the day with other duties in the shop, apparently okay.

That night, however, they were rushed to the hospital, and in less than 36 hours after the boiler job they were both dead. The cause of the deaths was *Pulmonary Edema*. The cause of the accident was due to certain component parts or certain chemicals present in the boiler compound which apparently did no harm until the metal was heated by the torch—when it gave off *Phosgene Gas*. Chlorine and Phosgene gas, you remember, was used quite extensively in the First World War.

The Purchasing Department, of course, could not ask the manufacturer to disclose its secret formula, but I believe they could obtain from the manufacturer a list of the different chemicals in the compound, even though exact amounts were not mentioned. Perhaps we are not able to analyze these, but most state departments offer such a service under the board of health or hygiene, free.

Recommends a Touch of Psychology

I WOULD like to again touch on Education. This time a more specialized form. I believe one of the greatest needs today is to train men in supervisory jobs the art of handling human beings or applied psychology. I don't think we need to go into the more theoretical or advanced application of psychology. This would perhaps be too complicated and too indirect, but I do believe that the management should be concerned and work out, or have worked out for them, some such training for their supervisors — and certainly men in supervisory capacities should be interested in self-improvement.

In accident prevention work we are dealing for the most part with problems that have to do with human beings and their behavior and reactions under certain conditions. When we have machine failures it is a job of repairs and a matter of time and material. But when we have human failures it is an entirely different matter, and we can never be sure that our methods will actually bring results.

Dr. Victor L. Short, President of the Institute of Human Science of New York City, last year delivered four early morning lectures before the delegates of the National Safety Council at Chicago, dealing with this important subject. While I was not privileged to hear Dr. Short in person, I did have the pleasure of reading his lecture. He paints for us a very interesting picture of the progress of man. Remember his job is *Human engineering*, and in one of his lectures he began by saying:

"It is commonly supposed that civilization was a gradual evolution, that more or less simultaneously all over the earth man slowly began his steps upward. On the contrary, however, scientists of Biology and Anthropology teach us today that primitive man roamed the earth like animals for perhaps a million years and his greatest cultural achievements in all that time were his club, a tool or two of chipped flint, and a fish spear.

"Then suddenly (and comparatively recently) on the banks of the Nile in Egypt something happened which was to rapidly change the future history of mankind. Our savage ancestors had begun to gather in increasing numbers in the Nile valley because here they had stumbled on a freak of nature without parallel anywhere on earth.

Here at last was a dependable supply of wild barley, irrigated and fertilized by the annual overflow of the river.

"But as more and more wandered into the valley the bounty of nature was strained, there were more mouths to feed than the wild cereal harvest from the fields fertilized by the inundation of the river could provide for. And then one day some 6,000 years ago one of our primitive forefathers caught the idea suggested to him by nature; he scratched channels into the river mud, extended irrigation into new fields, and agriculture was born. From that first step some sixty centuries ago all civilization was developed.

"But the habit of savagery has been welded into the mind and body of man for 10,000 centuries, while it is only sixty centuries that he has had more or less leisure, and opportunity to develop the finer things of life. It is as if a man emerged from the wilderness at the age of sixty years, and in less than five months undertook to divest himself of the life-long habits of barbarism and acquire a veneer of culture and ethical standards.

"There is evidence everywhere that man has not outgrown most of the habits of mind of his primitive ancestors. He is still swayed by blind impulses, and in his indulgences he has gained little more, if any self control than the savage. He over-eats, over-drinks, over-drugs, and over smokes. Not because he does not know better, but because he has not the moral stamina to resist."

The important thing now is that men in supervisory positions either in safety or production must delve into that phase of education known as psychology, or human engineering, if we are to cope successfully with this modern remodeled man. Why does he do this and why does he do that. Why do men react differently to apparently the same stimuli or treatment.

Hair on the Chest

WHERE is the man that can tell me why the man of small stature always wants the big car, why the womenfolk the world over prefer office work to housework. Why is it that men will not open the front of their shirts even on the hottest day unless they have at least a few hairs on their chest. Does the smoking of the big cigar or the wearing of the mustache mean anything to you. Each of these tells a story to those who understand the fundamentals of human engineering.

That great psychologist, Dr. Donald A. Laird, late of Colgate University, in his book, "What Makes People Buy", gives four unconscious motives, which I believe explains these:

1. The unconscious desire to be more adequate or more important.
2. The unconscious desire for romance.

MODERNIZE YOUR BUCKET ELEVATORS FOR Greater Capacity



Wartime volume, labor shortage, material restrictions, etc., are challenging the ingenuity of many an elevator operator today. Thoughts of tearing out old bucket elevator legs in anticipation of larger legs with larger buckets to obtain greater capacity isn't the remedy for the situation.

In the first place, use of needed critical material and labor to make changes hinders the war effort. Secondly, larger buckets are oftentimes unnecessary, because desired capacity increases can be obtained with "Nu-Hy". Buckets that are scientifically designed for close spacing and maximum carrying capacity without backlogging losses.

No other bucket can approach the "Nu-Hy". We have demonstrated it in countless installations. Your old legs can be modernized and brought to high efficiency by changing over to "Nu-Hy's" and following out our recommendations.

Our Form No. 76 will enable us to make a Capacity analysis for you. From there on you will experience smooth sailing. Write today.

Screw Conveyor Corporation

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ENGINEERS AND MANUFACTURERS

PRODUCTS U. S. PAT. OFFICE

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2,303,728
Can. Pat. No.
407,149

3. The unconscious desire for long life.

4. The unconscious desire to be more masculine.

These four unconscious motives I believe will answer most of the questions. For instance, I believe number one, the unconscious desire to be more adequate or important, would answer why the small man usually likes to drive a big car. It makes him feel important.

And number two, the unconscious desire for romance, perhaps answers why womenfolk prefer office work to housework. There can certainly be no romance in housework.

And number four, the unconscious desire to be more masculine perhaps explains why a man will not open his shirt without having hair on his chest, as well as the wearing of a mustache. The smoking of a large cigar may be considered either under number one or four.

Big Jobs of the Future

Paul Garret, Vice President of General Motors, in speaking of leadership said this: "Leadership in business and industry will in the future pass to executives who make it their business to study human engineering with just as much science as they now study manufacturing and machines. The big jobs will be held by the generalissimos of human relations, men who in their comprehension of the practical factors of business include also a knowledge of the influences which move men's minds and hearts".

Again I would like to quote Dr. Short when he says: "Human engineering is the art of handling people, a knowledge of the influences which control us as human beings. In the final analysis the solution of the accident problem depends upon our ability to deal effectively with a great variety of people; the aggressive, the backward, the indifferent, the egotistical, the timid, the griper, and the trouble maker."

Mr. A. C. Horrocks, of the Goodyear Tire & Rubber Company, in touching briefly upon foremen holds that foremen are selected for three principle reasons, and he named them—not in the order of their importance I am sure—but here they are: craftsmanship, judgment, and the ability to handle human beings.

Then Dr. Short asks, with this in mind, just how good is that foreman of yours, on whom you depend so much? In Craftsmanship? Chances are he is very good. Judgment? Probably questionable. Ability to handle human beings? Very poor most likely. And that is no reflection against him either, for he has been taught craftsmanship, his wife has helped him develop judgment, but rarely if ever has he been taught the rudiments in the handling of human beings.

In a recent survey made by the Carnegie Institute of Technology it

TWO MILLION DOLLAR MEAL



EVERY day America's eight million fighting men consume almost five million dollars' worth of food — nearly two million dollars a meal.

And that's in addition to what goes to our fighting allies.

On top of that, America's 35 million families, working harder and eating more, must have their meals.

That gives you some idea of the job America's farmers are doing.

This food is part of the wartime load the railroads are hauling. Together with war equipment, munitions and raw materials it adds up to 1 1/3 million tons of freight to be moved a mile every

minute of the day and night.

To keep it all on the go requires that a loaded freight train start on its way every four seconds.

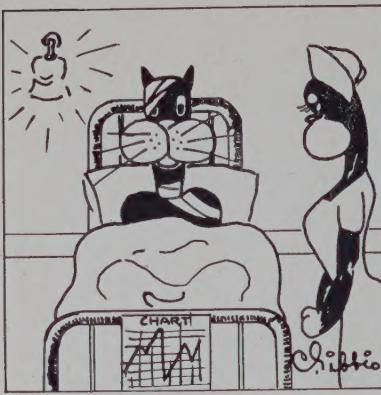
This is a load that no other transportation system in history has been asked to shoulder. It is being carried with little more equipment than before the war. And as with farmers, thousands of skilled railroad workers have gone to the battle fronts.

So far, with the fine cooperation of shippers and receivers, the railroads have carried the load.

And they are determined to keep on backing to the limit the men who are fighting to protect our free American way of self-reliance, enterprise and initiative.

BUY MORE WAR BONDS





Snooper, the Boiler-room Cat, says: It seems as though those "WARNING—DANGER" signs really mean what they say.—C. Gibson Franks.

was discovered that 85% of a man's ability, if he is to succeed as a foreman, should be in the art of handling human beings, or human engineering.

And so in conclusion, let me emphasize the statement that drive and enthusiasm necessary for a successful safety program must come from the top; management must lead the way. If I have left with you some points and thoughts that will be of value, and each of you will go forth more determined than ever to help make this a better and safer place in which to live, I shall feel that I have contributed at least a little toward the conservation of manpower and material.

MOTOR CAUSES EXPLOSION

Fire that started when an overheated motor caused a dust explosion in the Port of Tacoma (Wash.) terminal elevator's shipping gallery did \$20,000 damage.

36,000 WORKERS KILLED SINCE PEARL HARBOR

THE newspapers have been carrying various articles on industrial accidents since the war effort has started during the last year or two, and particularly since the U.S. entry into the war on December 8th.

The National Safety Council estimates that from Dec. 8, 1941, to Dec. 7, 1943, there have been approximately 36,000 deaths to industrial workers which occurred as follows:

1. Industrial accidents...14,500
2. Motor vehicle.....11,500
3. Home and public.....10,000

In addition this period has witnessed 4,500,000 casualties on the home front ranging from bruised fingers to fatalities, of which 200,000 were crippled.

Regardless of how or why these industrial workers were involved in fatalities, the taking of this number of skilled workers from our industrial plants obviously presents a stupendous problem to industry as a whole and in our individual war effort. Destruction of this many people could not be more advantageous to the

FIRE INCIDENT SOARS

Because the number of extra alarm fires is increasing sharply in every city, an urgent appeal to readers of "GRAIN" to exercise the "utmost caution" against fire hazards is issued by the National Fire Protection Ass'n. In Chicago alone the number of extra fire alarms soared in December to over twice the number the previous month. Comparative figures with previous years is so bad as to be unbelievable.

7th SOGES SAFETY CONTEST STARTS

The seventh annual Superintendents Society's Safety Contest was launched on January first, according to committee chairman Oscar W. Olsen, Peavey Duluth (Minn.) Terminal Ele-



vator Co., and Contest Director Clarence W. Turnig of Minneapolis. Reports for 1943 are not entirely in so that figures can be released, however it is thought the winners would be known before long.

First in this new contest are Arnold and Walter Myers, Stratton Grain Co., Chicago and Schneider, Ind., and Elmer H. Hapke, Central Soya Co. Inc., Gibson City, Ill. Open to SOGES members, the \$5 charge



enemy than if they had been killed in actual combat.

Now is the time for management, safety directors, and foremen to really get down to business and not do just a fair job of safety promotion—but the most perfect job possible with the industrial workers. With the army taking as many men as it needs to fill the quota in the armed forces we cannot overlook the possibility and necessity of conservation of manpower in our industry, in our homes and on the highways in order that we might not obstruct in any way the filling of the army quota with able bodied men and the turning out of war material at a rate which will truly indicate that the U.S. and Canada are the "Arsenal of Democracy."

Is your management on its toes regarding safety? Is your safety program producing results? Are your foremen putting safety on the same plane with production?—C. G. Bender, The Kellogg Company, Battle Creek, Mich.

made for entering this activity is returned to participants in safety material, posters, trophies to the winners, etc. Last year 53 joined in this contest.

FIRE PRIZE TO CHICAGO

Although there has been a recent sharp upturn in fires in Chicago, the Fire Prevention week campaign which this city held in October was just declared winner of the first prize for the U.S. and Canada, according to an announcement by the National Fire Protection Ass'n.

The fire prevention campaign was sponsored by the Chicago Association of Commerce and the city's Fire Department, with hundreds of business concerns and nearly half a million school children participating.

Sounds Like Carbon Bisulphide

Hans Christensen sustained severe burns when a fire broke out in a box car near the Omaha terminal where he was employed. The blaze burst out and enveloped him when he started to enter the car. A fellow workman also was badly burned.

Dust on Roof Burns

Accumulations of grain dust on the roof of the Minneapolis Milling Co.'s 7-story plant burned recently from a fire said to have been ignited from an electric spark. Wood studdings supporting sheet metal panels suffered most.

If you attempt nothing, you will be a failure although you make no failures.

DON'T KILL OUR BOYS!

To meet our Third War Loan quota, everybody who earns a wage or receives an income or has idle or accumulated funds—everybody who can possibly do so—must invest in at least one EXTRA \$100 bond THIS MONTH. Those who can, should buy more.

Perhaps you might be tempted to say "I'm making plenty of sacrifice already. Let the other fellow do it." If so, stop and think a moment. How would you like to sleep in an open foxhole every night? How would you like to be caked with mud from head to toe . . . suffering from exhaustion, in momentary danger of losing an arm, a leg . . . or your life? Those are the sacrifices your own boy is facing, willingly, for you. What sacrifice can we make to compare with this? The little things we give up back home here cannot begin to compare. That's why we have GOT to do more! We must JOIN the invasion by giving up luxuries—necessities, even—and throw every dollar we have into the battle.

"A" AWARD OFFERED

"The workers in food processing plants are fighters, and a grateful nation stands prepared to bestow the symbol 'A,' the 'A' of achievement for outstanding performances in food processing plants," Marvin Jones, War Food Administrator, stated, in announcing a new program. This is the highest recognition the government can bestow for outstanding accomplishment in this field, and the award in no way competes with the Army-Navy "E". The "E" is available only to those food processing plants whose output goes mainly to the Armed Forces.

"Food processors in the United States have met an enormous challenge. They have had to handle more food than ever before in history. Industry has developed new methods of processing and handling to save shipping space, has developed foods to stand up in the tropic heat and the Arctic cold, and foods that a soldier can carry on long marches or that can be delivered under any military emergency.

"Enough food has been processed to keep our army the best fed in the world and to keep our civilians properly fed, and additional large quantities for our Allies who are helping us in this war," the Food Administrator stated. "Both management and labor in this field have successfully met the challenge of war."

A FABLE

RED said, "I've got nothing to sell, so I'll stop advertising and save all that money."

Black said, "This war will end some day, and then I'll need my customers more than ever. They'll soon forget that I have spent piles of cash telling them about my product. I'll just protect past expenditures for advertising by keeping at it now."

When the Japs and Hitler were put you know where, Red sent his salesmen back on the road. But everywhere they met this remark: "We thought Red was out of business, so we're buying from Black now."

All the money Black spent for advertising during the war had kept his name fresh. Customers knew all about how his factory was producing for defense. And they also knew he was keeping their problems in mind—and making constructive plans. His ads made their mouths water for normal times. They knew just what to do when peace came.

And did they do it? Well, Black's factory is running full time. The windows of Red's factory haven't been washed since peace was declared.

Moral: Write your own—but Don't Stop Advertising!

Money can be lost in more ways than won.

SCRAP IS A MUST!

Supply aides to the chieftains in charge of Allied invasion plans are looking anxiously to the nation's iron and steel scrap piles for continued production support to augment invasion thrusts. The supply of emergency supplements of new specialized implements of war brought about by invasion plans may bog down, they fear, if scrap supplies continue to shrink below their present level.

The need for steel in new guises, for landing mats, for heavy construction equipment, and for installations on new bases and bridgeheads, are among today's most acute production needs, according to the War Department's disclosures.

What Is Needed

What is needed after this war is a plan whereby agriculture can look after itself, and not be forever dipping into the National Treasury. No attempt should be made to control supplies once they have come into existence. If Governments will adopt this simple procedure and will at the same time set about reducing or abolishing all artificial hindrances to world exchange of commodities, they will find that the problem has been solved. They will also find that the task of distributing supplies can safely be left to the merchants who are specialists in distribution. — Corn Trade News, Liverpool, England.

A CONSISTENT WINNER SINCE 1928!



NAME ON REQUEST

He installed his first Rexall in 1928—his last order is dated Dec. 24, 1943—continuously during the interim, he has used miles of Rexall on grain and feed elevators and conveyors, also on bag conveyors. Has tried out many belts—prefers Rexall.

**CONTAINS
NO RUBBER**

**ECONOMY
THRU QUALITY**

IMPERIAL BELTING COMPANY
1750 S. KILBOURN

CHICAGO 23, ILL.

Safest Method of Working In Grain Bins

REPLIES RECEIVED FROM NATIONAL SAFETY COUNCIL MEMBERS IN ANSWER TO REQUESTS FOR INFORMATION REGARDING THE DANGER OF MEN SINKING INTO THE GRAIN WHEN WORKING IN BINS.

INQUIRY

How do you prevent your men sinking into the grain and thus being injured when working in grain bins or elevators?

REPLIES

(1) We have had no trouble from this cause either upon our cars or boats. It is true the men do sink in a little, not to the point of their position being dangerous. The only protection we use is to require men to wrap their shoes, and part of their legs with poultry bagging, this making a larger foot surface and preventing the irritation of grain getting within the shoes.

Shouldn't Leave Boswain Chair

(2) The best method of preventing a man from being buried in grain in the bin is don't send him down in a bin that has grain in it.

In the event that the sides of the bins have to be cleaned as the grain is being removed, the safest method of preventing accident to the man cleaning out the bins is, (1) never pull the grain while the man is in the bin, and (2) if it should be necessary to clean the bin down as the grain is being removed, have the grain shut off when the man is being lowered in the bin, and then do not let anyone start the grain up until the man cleaning out the bin tells them to go ahead.

As far as accidents happening in empty bins, the rule should be, that the man cleaning out a bin should never come out of the boswain chair if he is lower than the top.

In concrete bins of large size, as a rule there is a manhole in the bottom of the bin to let them come up that way. In this case, if there is any overhanging grain, no one should be permitted to enter the manhole from below.

Warns All Workers

(3) A man working in a grain bin is in danger of sinking into the grain only when the grain is drawn from the bin. It is our practice to notify

all persons concerned when a man is going to work in a bin. All outlets from the bin are then kept closed until these persons are notified the work is completed and the man is out of the bin. This practice should work out satisfactorily where the responsibility on handling the bin outlets is definitely placed upon certain employees.

Uses Siren Signal In Emergency

(4) We have never had an accident resulting from workmen working in bins, but the foreman having charge



of our elevator, as well as the men working therein have realized the danger connected with the handling of grain and the cleaning of bins, and we have been, perhaps, if anything, so careful that it has slowed up our efficiency somewhat.

We might add here, to give you some idea of the extent of our operations, that we have better than 300 steel and concrete tanks, with an average depth of about 115 feet.

These tanks are being cleaned continually. Any one of our crew may be

called upon to go down into one of these bins. To eliminate any possibility of danger, we erected or constructed a special apparatus for hoisting and lowering the men. Before the cleaning of each bin, the machinery is carefully looked over to see that the clutches holding down the ropes, and the chair are in perfect working order. We also have a sign we hang on the gate at the bottom of each tank in which the men are working, which has the wording, "Men working above; do not open."

We also, before we lower the man into the bin, strap him in the chair, and in addition strap a safety line to him. One chair is lowered into the bin at a time. When the man reaches the grain level, he gets out of the chair, but retains the safety line about his waist. We also warn each of these men never to walk toward the center of the tank, as the grain in the tanks may be somewhat undermined, due to the fact that more grain goes from the center, and rolls from the side to the center when it is being drawn through the gate below.

We also have a signal system, with high-powered sirens, so that if anything did go wrong, that signal, operated by any man in the plant, would be the signal to shut off all operations.

Uses Special Heavy Strap

(5) All of our storage bins are equipped with a ladder for descending into the bin. This method is used where we are sure there is no danger of the man sinking into the grain, and that is only used where the material is of such nature that this is impossible.

In other cases again, where the material is such that the man may readily be endangered from sinking into the grain, we use a portable windlass to lower the man into the bin. A special heavy leather strap is fastened around the man passing over his chest and under the hips so that while being lowered or raised, he is in a sitting posture. This last mentioned procedure is seldom required because most of our material will support a man's weight.

Hazard Comes From Burying

(6) We have never had the experience of men sinking in bins of bulk wheat, a man only sinks in a little over his shoe tops. We have even handled bulk flax seed and men could

stand on it. I have observed wheat, corn and oats handled in bulk in ships and a man will only sink about half way to his knees when walking on any of the three mentioned grains.

The hazard comes from burying men up when pouring wheat in the ship or bin. In a ship the men are in the wing or trunk and are safe from being buried. At times, if too much wheat is poured, some wheat has to be taken out before the men can get out. As this is an expensive operation, the men watch closely so it does not occur frequently.

If I understand the question, it deals with the hazard of men sinking into grain and from what I have observed there is no danger of this unless grain is being withdrawn through a spout and the man is pulled into the vortex.

In addition to the other precautions, we have a safety rule which reads as follows:—"Men trimming bulk cargo are to be checked in and out of the hold. Electric trimmers used for bulk cargo containing explosive dust shall be disconnected from conductors before being lowered into hold of ship; the electric current shall be kept shut off while conductors are being secured to or disconnected from the trimmers."

In addition to the foregoing, I should like to suggest, for your consideration, that where there is a hazard of men sinking into grain that all workmen exposed to the hazard should be equipped with life-belts.

Always Send Two Men

(7) It so happens that in our plant it is never necessary to send a man into a tank on top of the grain. Grains are sent into the tanks by means of a conveyor which deposits the grain into the top of the tank, falling to the bottom or to the present level. Grains are withdrawn from the tanks by means of a conveyor system which takes from the bottoms of the tanks. When a tank is absolutely empty we send men in to clean.

It seems to me that if it were necessary for our people to go in on top of the grain we would provide some sort of a catwalk for them to go on, or would have them wear a safety belt and a buddy accompanying them or rather watching at the opening. Some people with grain storage facilities may have to pursue different methods than we do. But if it is at all possible I think steps should be taken to avoid the necessity of going in on top of the grain at all.

(8) Our instructions are to always have a rope available and at least one helper on top of the bin if a man must descend for some purpose. Ordinarily we do not go into grain bins unless they are empty.

Claims No Gas Hazard

(9) In our plant, we handle a good many different kinds of grain and meals, and in our experience we have no record of an employee having difficulty in walking on top of the bin

of grain. We have not had any experience with flax seed, which is about the only product of this type that might give trouble. In some grains, a man walking over the surface, might sink almost to his knees, but he is not in any danger of being buried.

Our grain bins are often as deep as 150 feet, which means that when it is necessary for an employee to go into one of these bins we must supply him with proper equipment so that he will be able to work safely. For this purpose, we use a small hand operated five ton hoist, equipped with a brake and pawls in the sprocket wheel to hold the hoist at any particular place. This hoist is mounted on an angle iron frame about three feet and six inches above the floor and is stuck immediately over the bin opening. From this hoist, a small seat, eight inches wide and sixteen inches long, supported by a channel iron frame and equipped with a three inch leather safety belt, is lowered by a steel cable into the bin. It is, of course, necessary for the man operating the hoist and the man descending into the bin to work very carefully together.

In our plant we have no danger of gases or other such hazards to the man descending into the bin, since all of our bins are well ventilated and usually have a strong draft through them.

Feed Bins Most Dangerous

(10) In regard to safety practices for men working in grain bins, note

that you feel that there is a danger of men sinking into the grain and being suffocated. As far as this risk is concerned it is absolutely nil as no grain that we know of will allow a man to sink. Of course there is a possibility that some grain may stick to the sides of the elevator bins and a man working dislodge same and become covered, but this risk is very small.

We do not allow any of our men, however, to go down in bins without a harness. One man always stays at the top of the bin to be in position to hoist his fellow workman should any occasion demand. We, however, very seldom lower a man in the bin. Modern elevators are largely built with an opening in the hopper or spout at the bottom so that men can go in from the bottom after the bin is empty to clean same if necessary.

In feed mills there is a different proposition as various feed ingredients, such as ground corn, have a tendency to arch over so that what is apparently a solid load is only a crust and a man going into the bin from the top and stepping on the crust will break through and be buried. In all cases of feed mills it is advisable to have a man lowered into a bin by a swing of some kind so that he can be pulled out in case of any trouble.

Smothered In Oats

(11) We do not allow our men to enter any grain bin that is being

IS THE "HAND Writing ON THE WALL" OF YOUR ELEVATOR?



Are there cracks . . . signs of weather-wear? Hallmarks of deterioration and forerunners of still greater destruction?

If there is evidence of needed repairs, we cordially invite you to consult our trained engineers . . . to investigate the time-tested scientific M A N Y principles of weather-proofing and rehabilitating all types of concrete and brick masonry.

An unbeatable record of plant restoration bears convincing witness of the sterling worth of our work . . . Yes, of our ability and willingness to render the most constructive service attainable.

B. J. MANY CO., Inc.

30 No. La Salle St.
213 State St., Detroit

Chicago, Ill.
Baltimore (Md.) Life Building

drawn from, unless we are absolutely certain that there is no danger of the man being sucked into the stream and being smothered. We handle only wheat in our elevator and there is very little danger of this happening in our bins at the rate at which we draw the grain from them. We have heard cases, however, of men being smothered in oat bins.

(12) Our men have no occasion to enter grain bins until the wheat is so low that it will not run without shoveling. There are openings at the bottom of each bin so that it is possible for a man to get out without difficulty. In all our milling experience this company has had no accident in such operations.

New Corn Treacherous

From reports over wide areas it appears the last corn crop is unusually treacherous to store. Even frequent inspections and moisture tests have not sufficed in all instances. Notable, say some, is the constant increases in moisture picked up.

CARLOADINGS REFLECT ACTIVITY

Cars of grain and grain products loaded during this last period continue to reflect the high rate of activity in the industry, as shown by these official weekly records:

	1944	1943	1942
Jan. 8.....	54,711	48,391	35,842
Jan. 1.....	40,719	39,921	32,021
	1943	1942	1941
Dec. 25.....	41,728	39,423	29,386
Dec. 18.....	48,564	47,688	41,431
Dec. 11.....	53,426	45,246	41,533
52 wks (+000)	2,648	2,117	2,023

Carloadings for the year 1940 totaled 1,834,593, and for 1939, 1,940,064.

Loadings for 2 weeks, to Jan. 8, were 8.1% ahead of those the previous year and 40.6% above two years ago.

He who will not reason, is a bigot; he who cannot, is a fool; and who does not, is a slave.—Wm. Drummond.

DROUTH NO WORRY

The drouth in the Northwest is not a source of concern, according to Dr. C. O. Rost, soils expert at the University of Minnesota college of agriculture, citing the 81 day dry spell of 1936 to illustrate the little consequence to agriculture of the present lack of moisture. Moisture content of the soil was fairly normal up to the time the drouth started, and if it again becomes normal during late winter and early spring damage will probably be inconsequential.

The Southwestern winter wheat crop outlook has improved materially with the advent of heavy beneficial rains and snow. Crop observers estimate winter kill damage has been slight.

HEAVIEST GRAIN SHIPMENTS

The 1943 Great Lakes shipment of grain was the largest in 15 years despite the six weeks' delay in opening and the acute shortage of vessel space. Vessels loaded 420,882,016 bu of American and Canadian grain, compared with 299,237,926 bu in 1942. The all-time record grain movement of 575,746,382 was established in 1928.

Duluth-Superior elevators loaded 71,534,385 bu or about 1,300,000 bu less than in the previous season. The total, smallest for the ports since 1937, was slashed because of a vessel shortage. The rail movement from Duluth-Superior aggregated 60,000,000 bu—largest in the history of the twin ports.

South Chicago and Chicago hit an 85-year shipping low with 5,433,000 bu. [In 1921 Chicago shipped 125,904,455 bu.] Noted as the corn belt port, Chicago last season entered the category of receiving ports, 8,004,000 bu of Canadian grain, largely rye and oats for live stock feed being unloaded to its elevators.

The Canadian twin ports of Fort William and Port Arthur shipped 343,914,631 bu of grain. The bulk of this was hauled down the lakes in the last three months of the season. At the peak of the rush, elevators loaded

6,541,532 bu of grain into vessels in one day for an all-time record.

As a result of the huge movement Canadian elevators today are practically empty, states one correspondent. A year ago they were holding more than 150,000,000 bu of wheat and other grains.

With most of the lower lake elevators jammed to capacity there was a brisk demand for vessels to hold storage cargoes and the rate soared to 10 and 11 cents. Permits were issued to 137 vessels to hold grain as against only 54 the previous year. Lake permits, so far unreported, are expected to swell this season's total.

Biggest Tonnage Yet

With one-third fewer locomotives under steam than in 1918, one-sixth less freight cars, one-third less passenger cars, and almost one-fourth less employees, the railroads have run up an enviable record of almost twice the combined freight and passenger mileage of 1918.

The greatest volume of freight traffic was handled in 1943 for any year on record, amounting to 725,447,456,000 revenue ton-miles, an increase of 13.7% compared with 1942, and an increase of 53% compared with 1941. A 1.2% increase is forecast for the first quarter of 1944.

Exports Up 76%

Export grain unloaded at all ports in 1943 totaled 53,204 cars compared with 30,315 cars in 1942, an increase of 76%. Export grain unloaded during December totaled 5,770 cars, compared with 2,195 in Dec. 1942, an increase of 163%.

New Plants for Alcohol

With 170,000,000 bu of grain estimated as essential for the 1944 industrial alcohol program, the industry is considering erection of plants to utilize non-food raw materials for a portion of the production, WPB announces, in order to somewhat relieve pressure on edible grains. Among the possible grain substitutes are petroleum gases and wood wastes.

Plan Ahead for Your STEINLITE

Success today demands planning . . . placing orders far ahead. In your plans for next season, include an easy-to-use Steinlite. Book your order now. Permit us to make shipment within a 60 day period* just ahead of the busy season. No down payment required.

The Steinlite is Fast, Accurate and Easy to Use.

It is Fast: An experienced operator can make a test in one minute. It is Accurate: Calibrated against official Government oven methods . . . built by staff of radio laboratory technicians. It is Easy to Use: Almost as easy as tuning in a radio . . . operates on radio frequency impedance principle. 10 days free trial.

"HEADQUARTERS" for moisture testers, scales, probes . . . all seed and grain testing equipment.

The STEINLITE
One Minute
Moisture Tester



626 BROOKS BUILDING, CHICAGO 6, ILLINOIS

SEED BUREO
EQUIPMENT COMPANY



Canadian Wheat To Mexico

A movement of approximately 3,345,000 bu of feed wheat was shipped from Fort William by two grain houses through Chicago during the past movement year. Beginning next March the accumulation will move southward on barges to New Orleans and by ocean steamers to Mexico.

200 Cars Daily From Canada

To import 40,000,000 bu of feed wheat from Canada, the ODT has ordered the allotment of 200 railroad cars daily. Russian and military demands for grain are increasing so without such diversion grain stocks in this country would fall below the danger point, according to Marvin Jones, War Food Administrator. U. S. wheat stocks will drop to about 134,000,000 bu by July 1, 1945, he said. The government's plan is to import by rail 40 million bu of wheat during the first six months of 1944 and 10 million bu during the last six months—in addition to the lake-borne movement.

WHEAT GRIND SOARS

During November 48,698,529 bu wheat was ground by 994 mills, compared with 48,689,821 ground by 995 mills in October, and 43,306,561 by 1,073 mills in Nov. '42. Of this amount 182 mills ground 81.3%. Of the 994 mills reporting, 25 reported grinding 2,357,269 bu wheat in the production of granular flour.

For the first five months of the new crop year the 225,834,687 bu wheat were ground by the 1,000 mills reporting as compared with 217,956,501 by 1,079 mills for the same period a year previous. These plants grind 93.5% of the total wheat-flour production.

Chicago's Receipts Up

Great Lakes movement of all grains into Chicago during 1943 totaled 14,715,000 bu compared with 2,687,000 bu the previous year. Shipments, however, declined from 12,832,000 bu in 1942 to 5,511,000 bu in 1943.

To Build New Plant

To replace the plant destroyed by dust explosion and fire on Dec. 19, the Plymouth Cereal Mills, La Mars, Ia., will erect a concrete and steel elevator at once, if priorities can be obtained.

Cargill Buys C&NW House

Cargill, Incorporated, Minneapolis, purchased Chicago's biggest elevator earlier this month—the ten million bu Northwestern Elevator which the grain firm has had under lease for some time. Occupying 84 acres of land, the property brought \$1,783,545 to the selling railroad.

He's a very good friend of mine, we run around in the same circles.

To Stop Notify & Advise Shipments

Effective Jan. 16, the ICC has ordered all railroads not to accept shipments moving interstate or intrastate, (1) when consigned to a "notify" or "advise" party at a location other than the billed destination of the shipment; or, (2) unless party at billed destination is authorized to accept notice of arrival and furnish disposition orders.

All tariff rules and regulations, insofar as they conflict with this order, are suspended. The order covers all carload shipments of grain, grain products, grain by-products and seeds, but does not apply to carload shipments of the above products for which a shipping order or B/L has been tendered to a common carrier by railroad prior to the Jan. 16th effective date.

Linseed Outlook Discussed

The linseed oil outlook for 1944 and various wartime requirements for the oil were discussed at a recent meeting of the Linseed Crushers Industry Advisory Committee. Ample flaxseed was promised by FDA officials to assure top capacity during the year, enough to crush at least 60,000,000 bu, producing approximately 1,140,000,000 pounds of linseed oil.

Imports of oil during this year are estimated at 30,000,000 pounds and stocks on hand Jan. 1, 1944 totaled 250,000,000 pounds. This will provide an aggregate total linseed oil supply for 1944 of 1,420,000,000 pounds. Current shortages in other fats and oils will necessitate the diversion of considerable quantities of linseed oil to meet these shortages.

Seneca Elevator Coming Down

The Seneca, oldest elevator in Buffalo, the last of the many wood-constructed houses that stood on the waterfront, will be torn down this spring because of high insurance rates resulting in unprofitable operation. This familiar old million bushel landmark was completed in 1897 as the "Export" elevator by Armour Grain Co. The Superior Elevator Corp. changed its name upon purchasing it in 1924.

Rated Capacity Defined

In any order where the wording "rated capacity" of a railroad car is used, OPA holds that this means any amount moving in a railroad car for which the railroad has accepted shipment at the carload rate. This clears up somewhat some of the confusion which has existed relative to "rated capacity" where it was impossible—because of the bulk of certain items—to load into the car the full tonnage called for.—G&FDNA.

Forecast Slower Movement

A 3.7% decrease in the movement of all grains is forecast for the first quarter of 1944 by the 13 Shippers' Advisory boards, or 356,412 cars compared with 368,989 actually loaded during the same period last year. A 6.6% increase is anticipated in the loadings of flour, meal and other mill products during this period, or 232,799 cars compared with 218,465 actually loaded during the first quarter of 1943.

Canadian Capacity Up

An increase of 180,000,000 bu in the grain storage of Canada is indicated by the Board of Grain Commissioners' report showing licensed capacity of 603,700,000 bu on Dec. 1, 1943, compared with 423,000,000 bu on Dec. 1, 1939.

Take Your Pen in Hand

Army camp statistics reveal that Johnny Doughboy writes three times as many letters as he receives. And this is not because his Uncle Samuel carries mail free for servicemen. It's because he hopes to inspire the folks back home to stir their inkwells and break loose in a rash of homespun gossip that will lift him out of the mire of military routine.

If you've never stood in the "mail line" for half an hour or more, and arrived at the P.O. window only to have the mail sergeant growl impersonally, "Nuthin' today, Bud," you'll never realize just how much mail means in maintaining morale and the spirit of the man in service. Write 'em folks, and write 'em often.—RGM.

It's dangerous to lose the habit of acquiring friends.

HIGH CAPACITY GRAIN CLEANING EQUIPMENT for TERMINAL ELEVATORS!



NEW PRIORITY-RATED
EQUIPMENT AVAILABLE
FOR ESSENTIAL NEEDS

Hart-Carter normally offers a complete line of special, heavy-duty cleaners for terminal elevators. Included are the 2564 Carter Disc-Cylinder Separator, combining discs and cylinders; and the all-cylinder 45 Hart Uni-flow Grain Separator. These machines offer a profitable answer to whatever cleaning, grading, separating or processing jobs you may be called on to handle.

HART-CARTER COMPANY

670 Nineteenth Ave. N.E.

Minneapolis, Minn.



Blitz
YOUR GRANARY PESTS
INTO OBLIVION WITH THIS POWERFUL,
PENETRATING, ECONOMICAL TREATMENT

When Grain can be turned — Use
STRAIGHT

Larvacide
CHLORPICRIN

• Easy, Economical Fumigation—applied when receiving or turning. Needs no expensive apparatus. Penetrates the berry to kill life within. Toxic to granary insects, including eggslife and larvae. • COSTS only \$1.50 to \$1.70 per thousand bushels . . . in closed concrete bins. • LARVACIDE comes in cylinders 25-180 lbs., and handy 1 lb. Dispenser Bottles, each in safety can, 6 or 12 to wooden case.

... and for Grain in Shallow Bins—
Use Surface Treatment with

Larvacide
MIX
CHLORPICRIN-CARBON TETRACHLORIDE

• Sprinkled or sprayed onto grain, quickly volatilizes and sinks through with same killing effect on insects, eggslife and larvae. • LOW COST: for Corn in good condition \$2.60—\$2.75 per thousand bushels—Wheat—just a little higher. • LARVACIDE - 15 - MIX comes only in 50 gallon drums.

Use Larvacide for rats and mice. Drives rodents out of retreats to die on the open floor without carcass nuisance. Write for Literature. Address:

INNIS, SPEIDEN & COMPANY

Established 1816

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ASSOCIATIONS ARE FOR MEMBERS

The bulk of the various state grain dealer associations have held their annual conventions. They have been largely attended and the delegates have returned to their homes. Some of those in attendance carried back to their town ideas that will be worth money to them, while others gathered only a headache, a hangover and a guilty conscience. That, of course, is their own lookout.

The adjournment of the convention means that in most cases the dealer has completed his active participation in the affairs of his organization for the year. To an observer on the sidelines, associations appear to be a good deal like Old Faithful, the famous geyser in Yellowstone Park. At stated periods, they roar forth and after a hectic outburst die down to repose for another six months or a year. Perhaps the comparison between members and Old Faithful is even better as during the convention they certainly do roar.

Some men knock the association because they say it never does anything for them and takes their money for dues. Yet these very same men will refuse to take any active part in association work and will not even tell the organization what would be helpful to them.

Every secretary of an association is prepared and willing to assist its members in every possible manner. He is their ready servant, and is not to be blamed if members refuse to allow him to help them. The dealer, not the officers or secretary, is the man who gains by association work. He gets out of any organization what he puts into it.—W. D. Fleming, Sec'y, N. W. Feed Dealers Ass'n.

THE NECESSITY FOR IMPORTS

On November 15th The Times of London, England, in an editorial expressed its concern about the drive the United States Government was making to secure for herself World markets after the war. The Times noted, however, that no preparation appears to be in sight by the United States for the acceptance of a corresponding influx of foreign goods and services into the United States.

This omission, argues The Times, may lead to calamity, for nothing, the editorial states, leads more to economic chaos than a policy which seeks to inflate exports without applying equal stimulus to imports.

It remains merely to be said that every word of warning issued by The Times about the action of the United States applies equally well to Canada, for here in this country, too, we hear of great plans being made to turn over war factories to peacetime production with the object either of greatly increasing Canadian exports of manufactured goods, or of producing goods for Canadian consumption to take the place of imports. Such a Canadian policy, too, we venture to state, will equally well lead to the same disaster and calamity to which The Times draws attention.—Searle Grain Company, Ltd., Winnipeg.

RECIPES FOR HAPPINESS

An occasional change is necessary if the daily work is to be done with zest. Contrary to the general idea, however, work is not a curse from which anyone with any sense escapes at the first and every opportunity. Go fishing, golfing, touring, cruising, hunting, exploring, mountain climbing, skiing, gardening, farming or stamp-collecting for a day or two if you are attracted by any or all of these.

Look forward to vacations and holidays eagerly and have ideas about an ideal vacation, but you will find as you get nearer the age when it is possible to take a permanent vacation without losing any self-respect, that the prospect of care-free idleness or the happy pursuit of an avocation will have lost its lure.

Keep your job. Keep your feet on solid earth. That's the kind of a life for anyone in possession of his physical and mental faculties!

PRODUCES MILLIONTH CUP

The one millionth "Calumet" cup was produced by the B. I. Weller Co. on Dec. 2, according to John I. Denney, president, and Marshall George, vice president. Developed and patented in 1933 by the late "Barney" Weller, it was said to be the greatest



improvement in design in over two decades and its popularity grew steadily because of its high capacity, strength, and efficient performance.

It was the first one piece welded bucket to be offered the industry, back in the infancy days of welding—now recognized as the most efficient and strongest way to join together two pieces of metal. "Barney" Weller hit upon the patented logarithmic spiral curve of the bottom of the cup through remembering that in his early experiences as a designing engineer horses on a race track laid out on this principle (instead of the usual oval), showed greater speed by several seconds. Adopting this curve, he found that when the cup scooped up grain and products in the elevator boot, as well as when it discharged, the principle involved resulted in larger loads per cup and complete discharge in the desired direction. Friction and back-legging were reduced to a minimum, and because of its performance it was found cups could be spaced closer and belt speeds boosted, further increasing the load elevated.

Pictured is Vasile "Tony" Antoniu, company plant superintendent for over two decades. Known to all in this area, "Tony" chuckles when he recalls the trials and tribulations experienced when Mr. Weller was developing the "Calumet." He takes pride in watching cup production grow each successive year—but Number 1,000,000 will be his particular joy for some time. All three of the men are members of the Superintendents Society.

Edison once said that he was more of a sponge than an inventor. He gathered ideas from everywhere.

Save Paper Campaign

Paper has become a critical material. Paul Christensen of Van Dusen - Harrington Co., Minneapolis, headed a SOGES Chapter campaign to salvage waste paper around the elevators and processing plants of the twin cities, and from all reports everyone was astounded by the quantity recovered. While full details are lacking, all can contribute their share by saving ALL the needed paper instead of burning or otherwise disposing of it.

Omaha Get-Together

The Omaha-Council Bluffs SOGES Chapter held a meeting before Christmas and it was a good one. Plans for the coming series of meetings are under way and we expect to have some very interesting sessions to tell all the others about.—John T. Goetzinger, Rosenbaum Brothers, Sec'y.

BACK TO TORONTO?

Just looked over the last issue of "GRAIN" and felt that I'd like a chat with some of the old gang, so I picked on you. In looking over the familiar faces, I miss Jack Coughlin's, and it gives me a lonely feeling.

Am feeling pretty well, but am not making the hunting trip this fall. Have enjoyed a pleasant summer fishing on the Bay and have just taken my launch out of the water and locked the boat house for the winter.

Say "hello" to all the boys for me, and if any of them happen to be this way in the summertime I'd like to take them out for a fish. Today (Oct. 19th) is our 49th wedding anniversary and if I live until Jan. 2nd I'll be 76.

We'd all like to have another convention in Toronto, and do hope the boys will decide to come back soon.—Jim Shaw, Port McNicoll, Ont.

Dr. Price III

Dr. David J. Price, government authority on grain elevator dust explosions and now President of the National Fire Protection Ass'n, recently left the hospital in Washington, D. C., where he has been since before Christmas. He is now recuperating at his home at 701 Whittier St., N.W.

Tyler Succeeds Kraly

William A. Tyler succeeds Michael Kraly as Superintendent for the Fleischmann Malting Co.'s Chicago plant. Mr. Kraly now holds forth on the night shift.

LADIES' NIGHT FEB. 5

Our annual Ladies' Night party will be held Feb. 5 at Freddie's Cafe. We are expecting about 200, including the SOGES members from Duluth-Superior.—James Auld, Hales & Hunter Co., Minneapolis SOGES Chapter Sec'y.

TOM DYER ADDRESSES

Tom G. Dyer, widely known Northwest sales manager for Russell-Miller Milling Co., was the principal speaker at the January meeting of the Minneapolis SOGES Chapter. He titled his fascinating talk—"The Romance of Grain as Related to Feeds." A buffet supper preceded the meeting.

Grover Meyer to Talk

Grover C. Meyer, Kansas City (Mo.) Power & Light Co. authority on electrical problems in grain handling and processing plants, will address the Minneapolis Chapter on "Electronics and Grain Conditioning" on March 7.

CHICAGO TO MEET FEB. 26

The Chicago Chapter's Annual Associates' Night technical clinic has been tentatively set up for Feb. 26 at the Little Club, 563 W. Randolph St., according to Marshall George of B. I. Weller Co., chairman. This yearly affair has attracted quite an attendance from near and far.

Serving with Chairman George on the committee are: Parke Burrows, Seedburo Equipment Co.; Russell B. Maas, Screw Conveyor Corp.; Ingram Richardson, Richardson Scale Co., and H. G. Onstad, contractor.

Bob Sorenson to War

Bob Sorenson, Elevator Super for International Milling Co., New Prague, Minn., has joined the armed forces. Don't know who his successor is as yet.—James Auld, Hales & Hunter Co., St. Louis Park, Minneapolis SOGES Chapter Sec'y.



1,000,000th The greatest tribute to the high efficiency of the CALUMET Super-Capacity Elevator Cup is that over one million have been put into service throughout the country.



Sold by reliable dealers everywhere. Send for Form 35 for analysis of how to step-up efficiency and capacity of your elevator leg.

B. I. WELLER CO.
327 S. La Salle St., Chicago 4

TWO TRAFFIC MEN WANTED

Two traffic men wanted, one for Indianapolis and one for Chicago. Must be capable of handling position with terminal elevator firm. Give qualifications, etc., in first letter addressed to "GRAIN," Board of Trade, Chicago 4.

NOW HE'S BOSS

Gordon Laugen, president of the Chicago SOGES Chapter, has just been made Manager of the Archer-Daniels-Midland Co.'s local plant, succeeding W. L. Taylor.

WELCOME VISITORS

When you're in town drop in and see us. You're always more than welcome.

Last month we were favored by visitors from Orland Lehnus, General Foods, Inc., Kankakee, Ill.; Dr. John H. Parker, Kansas Wheat Improvement Ass'n, Manhattan, Kan.; Frank "Slim" Carlson, Occident Terminal Elevator, Russell-Miller Mfg. Co., Duluth; Frank Blodgett and Harold Hantz, Weevil-Cide Co., Kansas City, and C. C. Gray, Superior Separator Co., Minneapolis.

BURGER SUCCEEDS HOFFMAN

Fred Hoffman, Super for The Early & Daniel Co., Indianapolis, resigned his post Dec. 15 to enter into a business venture in Florida. He has been succeeded by Carl Burger who has worked for the same company a goodly number of years. Carl is quite enthused about joining the Superintendents Society and you can expect a check before long.—Fred Myers, Cleveland Grain Co., Indianapolis.

FORSELL HEADS DRIVE

Lloyd Forsell, Albert Schwill & Co., malsters, was just made chairman of the Infantile Paralysis drive for grain handling and processing plants in Cook County. Vice President of the Chicago SOGES Chapter, Lloyd has stacks of coin folders just awaiting a call. "I know the Chicago plants will add many new miles of dimes to this worthy cause," he states.

MacNicol's Son Killed

Lt. Col. George MacNicol, son of E. P. MacNicol, assistant to the president of the American Feed Mfrs. Ass'n, was killed in action, according to word received Christmas week. Details are lacking. He was awarded the Distinguished Flying Cross for his part in planning, organizing and leading the spectacular tree-skimming air raid on the Foggia airfields in Italy. His widely known father addressed the Chicago SOGES Chapter recently.

Those who strive for merit shall attain success.

FORGING AHEAD ON MEMBERSHIP

"The commendable parade of new members continues," reports Harold Wilber, A. E. Staley Mfg. Co., Decatur, Ill., SOGES v.p. for Membership. "Welcome one and all, and may you find your investment in your association one of your most helpful. We are here to serve one another; to acquire greater technique in doing our own work better—for he who knows everything is going down hill." New members joining since the Fall campaign began, Sept. 1, include:

551 Thomas Lee Brittain, Blair Elevator Corp., Atchison, Kan.
552 Fred H. Hoffman, Early & Daniel Co., Indianapolis.
553 William H. Gravatt, Davis-Noland-Merrill Grain Co., Kansas City.
554 Charles E. Harbin, Underwriters' Grain Association, Chicago.
555 D. H. Douville, Underwriters' Grain Association, Chicago.
556 Frank J. Kohout, A. C. Horn Co., Minneapolis.
557 Harmon F. Norton, Apple River Mill Co., Minneapolis.
558 Lawrence Hoskins, Iowa Milling Co., Cedar Rapids.
559 Russell B. Millburn, Honeymead Products Co., Cedar Rapids.
560 Edward C. Howes, Dominion Gov. Dept. of Grain Inspection, Montreal.
561 Bernard J. Owens, Manager, B. & J. Milling Co., Jersey City.
562 Sidney I. Cole, Industrial Erectors, Inc., Chicago.
563 Alan B. Wilson, Charles W. Sexton Co., Minneapolis.
564 Ernest O. Ohman, Osborne-McMillan Elevator Co., Minneapolis.
565 Herbert L. Wilkins, Minneapolis Mills, A-D-M Co., Minneapolis.
566 Clare W. Cornelison, Dickinson Feed Mill, A-D-M Co., Minneapolis.
567 Al E. Lundquist, Innis Speiden & Co., Chicago.
568 Harry Hanson, The Glidden Co., Chicago.
569 Harry R. Press and
570 M. Earl Ott, Lakeside Metal Service, Inc., Chicago.
571 John DeHerr, Ass't Supt., Columbia Malting Co., Chicago.
442 O. B. McCall, Farmers Union Jobbing Ass'n, Topeka.

Ward Combs Promoted

Ward A. Combs, proprietor of the Presto-X-Co., Omaha, before joining the Navy, has been promoted to Pharmacist's Mate, Second Class, according to word from Oklahoma City. Since last reports he has been transferred to Tulsa and back again. He is in the Office of Naval Procurement.

"Scrappy" Sheet

"GRAIN" is a scrappy sheet. I like to read it every month.—E. C. Murray, Buffalo.

FORSELL CONTINUES IN LEAD

Lloyd Forsell continues in the lead in obtaining new memberships in the SOGES, reports Harold Wilber, SOGES v.p. Here's the record, brought right up to the minute:

6 Lloyd Forsell, Chicago
5 Cliff MacIver, Minneapolis
4 Jim Kier, Kansas City
3 Jim Auld, Minneapolis
3 Gil Lane, Chicago
2 Fred Myers, Indianapolis
2 Harold Wilber, Decatur, Ill.
1 Frank Jost, Chicago
1 Herb Brand, Cedar Rapids
1 Andrew Rankine, Montreal
1 R. J. Lane, Jersey City
1 Ralph Wilson, Chicago
1 Emil Buelens, Chicago
1 John Long Chicago

CHICAGO TAKES LEAD

The Chicago SOGES Chapter is away out in front in the new membership campaign, according to SOGES Director Gilbert P. Lane, national president last year. The score tallies up about like this:

13 - Chicago
9 - Non Chapter
7 - Minneapolis
3 - Kansas City
0 - Omaha-Council Bluffs
0 - Ft. William-Pt. Arthur

And with all the members now belonging to the Society residing in Indianapolis and environs it would not be surprising to find a Chapter inaugurating monthly meetings there.

John Hall's Daughter Dies

Mrs. Christina (James G.) Hall McIllhiney, only daughter of Mr. and Mrs. John Hall, sick since last June, passed away on Dec. 26. John was formerly with General Mills before his retirement, and an active member of the Chicago SOGES Chapter.

MAILING LISTS



Gives counts and prices on accurate guaranteed mailing lists of all classes of business enterprises in the U. S. Wholesalers—Retailers—Manufacturers by classification and state. Also hundreds of selections of individuals such as professional men, auto owners, income lists, etc.

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PREFERRED!



SUPERINTENDENT WILLIAM H. GASSLER SAYS:

"As far as we can determine at this time, the workmanship and materials used on our Calumet Elevator last summer have proven quite satisfactory."

Caulking operations are shown in the center view; at the left the walls are being prepared for our elastic *Surfacite*—which is shown being applied in the view on the right.

Surfacite Waterproofing

... Preferred because all disintegration and cracks are repaired with GUNITE, which is stronger than concrete, is hard, dense, waterproof with perfect bond to the old concrete.

... Preferred because then all surfaces are covered with the soft, elastic material—SURFACITE—many times the thickness of ordinary waterproofing.

... Preferred because SURFACITE compensates for movement by a tough elastic hide and with a long-life flexible material bonded to the concrete.

You, too, will PREFER our services after we have gone over your problems, submitted facts, ideas and costs.

JOHN D. BOLTON -- GUNITE CONTRACTOR

20 NORTH WACKER DRIVE

CHICAGO, ILLINOIS

THE FUMIGANT THAT *Grew up* IN GRAIN ELEVATORS

The steady, year after year growth in demand for Weevil-Cide is *rooted* in *results* secured by users. Weevil-Cide has grown in popularity because it has demonstrated its worth in proven factors of safety, effective and uniform killing power, convenience of application and practical economy.

The Weevil-Cide Company is truly grateful for the privilege of rendering the grain industry continuously helpful service and pledges rigid adherence to the highest attainable degree of dependability in a grain fumigant.

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